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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/891,470

06/27/2001

Masanori Nakahara

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11/18/2004

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

FLETCHER, JAMES A

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,470

Applicant(s)

NAKAHARA ET AL.

Examiner

James A. Fletcher

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3, 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Please include the new Art Unit 2616 in the caption or heading of any written or facsimile communication submitted after this Office Action because the examiner, who was assigned to Art Unit 2615, will be assigned to new Art Unit 2616. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

Specification

2. The disclosure is objected to because of the following informalities: There are numerous instances of grammatically incorrect phrasing in the specification which render it difficult to understand. Examples include:

On page 2, lines 15-18, the text "However, in this audio DVD recorder, there may occur necessity of dividing a set of recorded audio information (hereinafter, referred to as original audio information) after recorded, by partially erasing the information" appears. The sentence is grammatically incorrect, and to the examiner's best efforts at understanding, it remains unclear exactly what is meant by "dividing a set of recorded audio information."

On page 3, lines 9-10, the specification contains the text "it is not preferable that the music tunes themselves are divided after substantially divided by one music tune." Again, this sentence is grammatically incorrect, and after the examiner's best efforts at understanding, it remains unclear exactly how a music tune can divide other music tunes.

Applicant is advised to revise the specification accordingly.

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3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 1, line 3, the term "division timing" appears. After the examiner's best efforts at understanding this term, it appears that division timing is simply the boundary points of the AOBUs shown in Fig. 1 without a reference number. The claims will be analyzed and discussed using this definition.

Claim Objections

4. Claims 1, 4, 6, 14, 16, 17, 19, 22, and 26 are objected to because of the following informalities: Each of the claims contains the text "an permission..." The examiner believes the text should read --a permission...--

5. Claims 2 and 12 are objected to because of the following informalities: Each of the claims contains several instances of the text "after recorded." The examiner believes the text should read --after being recorded--

6. Claims 5 and 15 are objected to because of the following informalities: Each of the claims contains several instances of the text "after divided." The examiner believes the text should read --after being divided--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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8. Claims 1-3, 7-8, 11-13, 19-21, and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding independent claims 1, 11, 19, and 25, the claims recite, "specifying a division timing." On page 2, lines 15-18 of the specification text, the applicant discloses "However, in this audio DVD recorder, there may occur necessity of dividing a set of recorded audio information (hereinafter, referred to as original audio information) after recorded, by partially erasing the information" appears. This appears to be the basis for the claimed language. To the examiner's best efforts at understanding, it remains unclear exactly what is meant by "dividing a set of recorded audio information." Further, there is no explanation that the examiner or his supervisor could find in the specification why such a dividing might become necessary.

Therefore, one skilled in the art would not be able to make and/or use the invention recited in claims 1-3, 7-8, 11-13, 19-21, and 25, given applicant's lack of adequate disclosure.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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10. Claims 1, 3-4, 6, 8, 10-11, 13-14, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nozaki et al (6,396,998).

Regarding claims 1 and 11, Nozaki et al disclose an information recording apparatus and method (Col 1, lines 6-7 "a DVD recording/reproducing apparatus") comprising:

- a device and process for specifying a division timing in the recording information (Col 7, line 53-54 "formatter 16F can automatically execute the dividing operation");
- a device and process for recording in the recording medium front part record information that is the record information before the specified division timing and rear part record information that is the record information after the specified division timing (Col 3, lines 18-19 "a recording section for recording the data units into a dubbing disc");
- a device and process for generating permission information indicating whether or not to permit at least one of the front and rear part record information to be further divided (Col 2, lines 34-35 "checking of copy protection information is carried out for every VOB"); and
- a device and process for recording the generated permission information in the recording medium (Col 2, lines 55-57 "a disc drive for recording data thus processed into the dubbing disc").

Regarding claims 3 and 13, Nozaki et al disclose an information recording apparatus and method comprising:

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- a device and process for detecting the permission information recorded in the recording medium (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”);
- a device and process for changing the content of the detected permission information (Col 2, lines 53-55 “a copy protection information updater for updating the copy protection information when determined copying of data being permitted”); and
- a device and process for overwriting the changed permission information on the recording medium (Col 2, lines 55-57 “a disc drive for recording data thus processed into the dubbing disc”).

Regarding claims 4 and 14, Nozaki et al disclose an information recording apparatus and method comprising:

- a device and process for detecting permission information from a recording medium having record information and permission information indicating whether or not to permit execution of edit processing (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”) for dividing the record information into two or more items of partial record information recorded therein (Col 2, lines 34-35 “checking of copy protection information is carried out for every VOB” and Col 3, lines 37-39 “a VOB

boundary detector for determining whether if a designated data unit exists on a boundary between objects”);

- a device and process for judging the content of the detected permission information (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”); and
- a device and process for only when the judged content corresponds to the content in which the division processing is enabled, executing the edit processing (Col 3, lines 18-20 “a recording section for recording the data units into a dubbing disc according to instructions from the copy permission determining section only when copying of the data units is permitted”).

Regarding claims 6 and 16, Nozaki et al disclose an information recording apparatus and method comprising:

- a device and process for specifying a division timing to divide the record information (Col 3, lines 43-44 “a cell divider”);
- a device and process for dividing the record information into front and rear part record information (Col 7, line 53-54 “formatter 16F can automatically execute the dividing operation”); and
- a device and process for generating permission information having the same content as the permission information recorded in the medium before division, relevant to each of the front and rear record information, then recording the information in the recording medium (Col 2, lines 3-6 “if the video data is

guarded by the copy protection information, the source disc video data are copied as they are into the dubbing disc”).

Regarding claims 8 and 10, Nozaki et al disclose an information recording apparatus wherein the recording medium comprises a DVD capable of information recording (Col 1, lines 6-7 “a DVD recording/reproducing apparatus”).

Regarding claim 17, Nozaki et al disclose an information recording medium comprising:

- a record information area having one or plural items of recording information recorded therein (Col 2, lines 59-61 “data are recorded in the data area in a form divided into a plurality of objects”); and
- a permission information recording region having permission information indicating whether or not to permit execution of edit processing for dividing each item of recording information into one or more items of partial record information (Col 2, line 67 - Col 3, line 18 “the management area contains therein...a copy permission determining section...reading data in units of the data units according to the pieces of program chain information and the pieces of object managing information to determine copy protection information in the first one of the management information packs” and).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 7, 9, 19, 21-22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozaki et al.

Regarding claims 7 and 9, Nozaki et al disclose an information recording apparatus wherein the record information comprises audio information (Col 4, line 67 - Col 5, line 1 "audio title set AUDIO-TS"), but does not specifically disclose that the audio information contains at least music information and voice information

The examiner takes official notice that music and voice are notoriously well-known and widely used types of audio information, being used in a multitude of recording genres, channels, and formats.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nozaki et al to specify audio data as including music and voice information.

Regarding claims 19 and 25, Nozaki et al suggest an information recording medium and computer data signal embodied in a carrier wave containing a recording control program (Col 5, lines 56-57 "an MPU [Microprocessor Unit] 13," known to function under program control) but do not specifically disclose a program for that MPU.

The examiner takes official notice that MPUs are notoriously well known to function under program control, and that the program control can be provided to the MPU can be provided either with a recording medium or over a cable. Such use of MPUs permits a widely used, commercially available means of performing a multitude of diverse operations based on the program control.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nozaki et al to specify a record control program and the known means of providing that program to the MPU.

Nozaki et al disclose a recording computer to function as:

- a device and step for specifying a division timing in the recording information (Col 7, line 53-54 "formatter 16F can automatically execute the dividing operation");
- a device and step for recording in the recording medium front part record information that is the record information before the specified division timing and rear part record information that is the record information after the specified division timing (Col 3, lines 18-19 "a recording section for recording the data units into a dubbing disc");
- a device and step for generating permission information indicating whether or not to permit at least one of the front and rear part record information to be further divided (Col 3, lines 11-14 "a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section"); and
- a device and step for recording the generated permission information in the recording medium (Col 2, lines 53-57 "a copy protection information updater for updating the copy protection information when determined copying of data being permitted, and a disc drive for recording data thus processed into the dubbing disc").

Regarding claim 21, Nozaki et al disclose having a recording control program causing a recording computer to function as:

- a device for detecting the permission information recorded in the recording medium (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”);
- a device for changing the content of the detected permission information (Col 2, lines 53-55 “a copy protection information updater for updating the copy protection information when determined copying of data being permitted”); and
- a device for overwriting the changed permission information on the recording medium (Col 2, lines 55-57 “a disc drive for recording data thus processed into the dubbing disc”).

Regarding claims 22 and 26, Nozaki et al suggest an information recording medium and computer data signal embodied in a carrier wave containing a recording control program (Col 5, lines 56-57 “an MPU [Microprocessor Unit] 13,” known to function under program control) but do not specifically disclose a program for that MPU.

The examiner takes official notice that MPUs are notoriously well known to function under program control, and that the program control can be provided to the MPU can be provided either with a recording medium or over a cable. Such use of MPUs permits a widely used, commercially available means of performing a multitude of diverse operations based on the program control.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nozaki et al to specify a record control program and the known means of providing that program to the MPU.

Nozaki et al disclose a recording computer to function as:

- a device and process for detecting permission information from a recording medium having record information and permission information indicating whether or not to permit execution of edit processing (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”) for dividing the record information into two or more items of partial record information recorded therein (Col 2, lines 34-35 “checking of copy protection information is carried out for every VOB” and Col 3, lines 37-39 “a VOB boundary detector for determining whether if a designated data unit exists on a boundary between objects”);
- a device and process for judging the content of the detected permission information (Col 3, lines 11-14 “a copy permission determining section for fetching the managing information from the data reproduced from the sourced disc by the reproducing section”); and
- a device and process for only when the judged content corresponds to the content in which the division processing is enabled, executing the edit processing (Col 3, lines 18-20 “a recording section for recording the data units

into a dubbing disc according to instructions from the copy permission determining section only when copying of the data units is permitted”).

Regarding claim 24, Nozaki et al disclose an information recording medium having recorded therein a recording control program causing a recording computer to function as:

- a device for specifying a division timing to divide the record information (Col 3, lines 43-44 “a cell divider”);
- a device for dividing the record information into front and rear part record information after the specified division timing (Col 3, lines 43-44 “a cell divider”); and
- a device for generating permission information having the same content as the permission information recorded in the recording medium before being divided, relevant to each of the front and rear part record information, and recording the information in the recording medium (Col 2, lines 3-6 “if the video data is guarded by the copy protection information, the source disc video data are copied as they are into the dubbing disc”).

13. Claims 2, 5, 12, 15, 18, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozaki et al as applied to claims above, and further in view of Kikuchi et al (6,577,811).

Regarding claims 2, 5, 12, 15, 18, 20, and 23, Nozaki et al suggest a status of erasing data after recording and further dividing (Col 14, lines 32-35 “Updates C_V_E_PTM of CELL_M to E_PTM of divided VOB, and updates EPI_Ns by erasing

them according to the CELLI of the CELL if EP exists after the updated E_PTM", but do not specifically disclose a discrete group of possible status situations.

Kikuchi et al teach an information recording apparatus and method wherein the permission information takes any one of:

- a first state in which it is enabled that at least either one of the front and the rear record information is erased from the recording medium after [being] recorded (Col 69, lines 50-56 "D-PRO 36X...erases data [files or VTS] recorded on disc 10X under the control of microcomputer block [MPU] 30X"), and that the information is further divided (Col 71, line 66 - Col 72, line 3 "MPU 30X...has an erase prohibition range specification function, erase prohibition setting function, cell divide function, and erase prohibition detection function for cell units, thus improving the operability of the system for the user");
- a second state in which it is disabled that the information is erased from the recording medium after [being] recorded (Col 69, lines 7-9 "a program which has already been played back but is to be kept can be prevented from being inadvertently erased by, e.g., overwrite by setting the archive flag"), but it is enabled that the information is further divided (Col 71, line 66 - Col 72, line 3 "MPU 30X...has an erase prohibition range specification function, erase prohibition setting function, cell divide function, and erase prohibition detection function for cell units, thus improving the operability of the system for the user"); and

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- a third state in which it is disabled that the information is erased from the recording medium after [being] recorded (Col 69, lines 50-56 "D-PRO 36X...erases data [files or VTS] recorded on disc 10X under the control of microcomputer block [MPU] 30X"), and that the information is further divided (Col 71, line 66 - Col 72, line 3 "MPU 30X...has an erase prohibition range specification function, erase prohibition setting function, cell divide function, and erase prohibition detection function for cell units, thus improving the operability of the system for the user").

As suggested by Nozaki et al and taught by Kikuchi et al, various states of allowing erasure of copied data are well-known and widely used, providing a user with the ability to restore useful storage media for storage of alternate data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nozaki et al to incorporate a variety of possible erasure conditions for copied material.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (703) 305-3464. The examiner can normally be reached on 7:45AM - 5:45PM M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached at (703) 305-4380.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, DC 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JAF
November 12, 2004


**ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**